
INNOVATIVE BEHAVIOR: THE ROLE OF PSYCHOLOGICAL EMPOWERMENT EMPIRICAL EVIDENCE IN MSMEs IN CENTRAL JAVA, INDONESIA

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Abstract

This study aims to explore the antecedents of psychological empowerment and its consequences. Employees of micro, small, and medium enterprises in Semarang City, Central Java, Indonesia, comprised this study's population. This study's sample size was 158 respondents from various business sectors. Food and beverages, beauty care, massage services, financial services, grocery, and other industries are included. Quota sampling was utilized as a sampling technique. The data were processed using structural equation models. The result indicated that transformational leadership positively affect on psychological empowerment. Knowledge sharing is significantly influenced by psychological empowerment. Other findings include the fact that psychological empowerment has a strong favorable effect on job performance and innovative behavior. This study has theoretical and managerial consequences.

Key Words

Transformational leadership; psychological empowerment; innovative behavior; knowledge sharing; job performance.

INTRODUCTION

The environment in which organizations operate is becoming more dynamic. Organizations that are creative and innovative are more likely to survive and thrive. The behavior of an organization's members will determine its level of innovation. Individual-initiated behavior is defined as new ideas being generated, created, developed, promoted, and executed to increase performance (Konermann, 2012).

Innovative behavior (IB) is critical for gaining a competitive edge (Martins & Terblanche, 2003). Organizations operating in a highly competitive business climate require IB to please customers and maintain a competitive position in the marketplace. Leaders are the most essential component in encouraging workplace innovation (Javed et al., 2019).

The most important predictor of IB is leadership (Jung et al., 2008). According to Conger (1999), one of the most powerful variables in promoting organizational innovation is transformational leadership (TL). TL increases work capacity and stimulates people's creativity. Conversely, the association between TL and IB is still unrobust. Some study findings on TL and IB are contradictory (Shin & Zhou, 2003). This condition promotes future research into the mediating and moderating elements existing between them. Organizations must use processes to improve organizational and employee results. Psychological empowerment (PE) is relevant in this situation (Lu et al., 2018).

PE is a key factor in explaining IB. A number of previous study have found that TL is the predictor of PE. Previous research has also found that PE is key in enhancing IB (Marane, 2012). PE refers to a person's cognitive condition characterized by a sense of authority, great motivation, and high skill in meeting work objectives (Spreitzer, 1995). Empowered employees will exhibit more innovative behavior. However, Kmiecik et al. (2012) discovered the different one. IB is not affected by PE. This gap is worth investigating to create a clearer theoretical understanding of the link between these two factors.

Moreover, PE has an effect on knowledge sharing (KS). This finding is congruent with the findings of Amichai-Hamburger et al. (2008) that PE is becoming increasingly significant in studying the effectiveness of social systems designed to encourage knowledge and information sharing. Job performance (JP) is also affected by PE. Conversely, the empirical evidence of a direct association between PE and performance quite varies (Chen et al., 2007). This indication urges academics to investigate these two variables to develop a clearer theoretical depiction of their relationship.

Thus, this study investigates the causes and implications of PE, and the specific goals of this study are to explore the effects of TL on PE, KS, JP and IB.

LITERATURE REVIEW

Transformational Leadership and Psychological Empowerment

TL emphasizes cooperation, collaborative task completion, learning from shared experiences, and delegation of authority to conduct ideas to improve employee participation in idea formulation and execution (Gumusluolu & Ilsev, 2009). TL has an empowering effect (Daft, 2021). This leadership develops a work atmosphere in which employees are encouraged to empower themselves.

Meanwhile PE manifests itself in four dimensions: meaning, self-efficacy, impact, and self-determination. It refers to an organizational member's positive psychological attitude, anticipation, and belief that he or she will be able to shape the job. Additionally, it is facilitated by TL. According to Avolio et al. (2004), transformational leaders strengthen their psychological empowerment by increasing their self-confidence and personal development through personalized consideration. Transformational leaders also challenge and bring meaning to subordinates' work, improving organizational members' psychological empowerment (Avolio et al., 2004; Jung et al., 2002).

Of the elaboration, the first hypothesis is:

H1: Transformational leadership positively affects on psychological empowerment.

Psychological Empowerment and Knowledge Sharing

Knowledge sharing (KS) is influenced by PE. Psychologically empowered employees tend to sharing more knowledge than those who are not. Employees will be more involved in knowledge-sharing activities if they feel psychologically empowered. Individuals who are competent in their employment will also share more knowledge than that of less competent individuals (Barling et al., 1996). According to the findings of Muhammed (2006), PE plays a crucial role in shaping knowledge management methods. Meanwhile KS is a byproduct of knowledge management.

Other research findings indicate that psychologically empowered employees are likely to share knowledge (Srivastava et al., 2006). Employees believe that they have more freedom and opportunities to experiment with and share fresh ideas if they are psychologically empowered. According to Locke et al. (1997), engagement in decision-making provides possibilities for employees to share knowledge, which increases knowledge-sharing activities.

For Kang et al. (2017), KS is a form of proactivity. Given that PE motivates individuals to perform better on proactive activities across multiple domains in their professional duties, certain levels of PE will influence KS. To foster KS, PE is required.

According to the prior elaboration, the second hypothesis is as follows:

H2: Psychological empowerment positively affects on knowledge sharing.

Psychological Empowerment and Job Performance

Meaning is a crucial aspect of PE. Individuals who believe that the work is vital to other people and the organization will perform better (Liden et al., 2000). Similarly, persons believing they have skills for the work they undertake will do well. PE influences not only the individuals's professional position but also the work environment. Work meaning can raise awareness on the importance of work, motivating them to perform better (Spreitzer, 1995). In a meta-analysis, Stajkovic and Luthans (1998) discovered a substantial relationship between self efficacy and job performance (JP). Employees with self-determination at work will respond to each scenario as it arises, and those who have a say in the outcome of their job will work harder to persuade their coworkers and affect their work unit direction. These features of PE motivate employees to accomplish their job as quickly as possible (Li et al., 2015). Employees will see the importance of their work if they are satisfied with it. Similarly, if employees understand that their job has an impact on their coworkers, they will perform well. The findings of Chow et al. (2006) reflect the previous findings that PE is highly connected to JP.

Furthermore, the literature describes the outcomes of PE as good and affecting JP. The empowerment construct explains how and why job of an employee acts as an incentive to empower, driving employee behavior that is ultimately linked to job performance (Harris et al., 2009). Moreover, PE leads to increased job efficacy, achievement and success, and improved performance.

As a result, the third hypothesis is:

H3: Psychological empowerment positively affects on job performance.

Psychological Empowerment and Innovative Behavior

Individual cognitive beliefs or motivational statements regarding authority inside the organization are the focus of PE (Seibert et al., 2011). PE is a motivating paradigm with four elements pertaining to an employee's attitude and role at work, namely, meaning, competence, impact, and self-determination. Job meaningfulness refers to the close link that employees have with their jobs (Farzaneh et al., 2014). Meaningful feelings will emerge, and then encourage employees more innovative at work (Chiang & Hsieh, 2012). Meanwhile, competence refers to a one's belief in their ability to perform their work and obligations well. Perceived autonomy allows employees to try out new ideas and is favorably associated with IB (de Jong & Kemp, 2003).

IB is a type of individual-level innovation that is critical for increasing competitive advantage. Individuals must be able to work outside of their usual activities, such as discovering new technologies, applying new working techniques, and doing studies to put new ideas into action (De Jong & Den Hartog, 2010).

As a result, our hypothesis is as follows:

H4: Psychological empowerment is associated with innovative behavior.

METHODS

This is an explanatory research which tests the stated theory. Therefore, the research findings will likely strengthen the theoretical framework. Meanwhile, this study's data sources comprise both primary and secondary sources. Primary data are information gathered directly from research respondents. Questionnaires are delivered to selected respondents to collect primary data. Meanwhile, secondary data are gathered from sources other than the research item.

Measures

The respondents in this study are employees of MSMEs in Semarang, Central Java, Indonesia. MSMEs with at least five employees meet the criteria for the research population. The sample size for the structural equation model was 158 people. The respondents work in various industries, such as food, and beverages, beauty care, massage services, financial services, grocery, and others. We used nonprobability sampling as our sampling technique, which does not provide the same opportunity to the sample population. The study utilized quota technique, in which a population with specific characteristics is sampled until the quota is met. The AMOS version 21 software program is used for structural equation modeling in the data analysis technique.

This study's variables include TL, PE, KS, IB, and JP. The transformational leadership questionnaire was adapted from Vuori and Okkonen (2012). Spreitzer's (1995) questionnaire was used for the psychological empowerment questionnaire items, whereas Vuori and Okkonen's (2012) questionnaire was used for measuring the knowledge-sharing variable. De Jong and Den Hartog (2010) questionnaire was used to assess innovative behavior. The job performance questionnaire was adapted from the questionnaire of Dyne et al. (2014).

FINDINGS

Respondents' Sociodemographic Profile

The researcher reported the respondents' sociodemographic profile, which included gender, age, education level, work experience, and business field.

In this survey, the respondents were 80 women and 78 men. Among the respondents, 81 (51.3%), 45 (28.5%), 24 (15.2%), and 8 (5%) respondents were <30, 30–40, 41–50, and >50 years old, respectively. In terms of educational attainment, 91 (57.7%), 12 (7.8%), and 23 (14.5%) respondents were high school, junior high school, and bachelor's degree graduates, respectively. In terms of job experience, 90 (57%), 40 (25.3%), 13 (8.2%), and 15 (9.5%) respondents have <5, 5–10, 10–15, and >15 years, respectively. Although the business fields in which respondents work vary, the food, and beverage, massage service, financial service, and beauty care sectors account for 84 (53.2%), 15 (9.5%), 9 (5.7%), and 9 (5.7%) of all respondents, respectively. Respondents working in electronics and food stores accounted for 5% of the total, with the remaining industries accounting for <5%. Table 1 contains information about the respondents' sociodemographic characteristics.

Table 1. Respondents Characteristics

		N	%
Gender	Men	71	44.9
	Women	87	55.1
Age	< 30 years	81	51.3
	> 0–40 years	45	28.5
	41–50 years	24	15.2
	>50 years	8	5
Education	Junior high school	44	27.8
	Senior high school	91	57.7
	Undergraduate	23	14.5
Experience of work	<5 years	90	57.0
	5 –< 10 years	40	25.3
	≥ 10–15 years	13	8.2
	> 15 years	15	9.5
Business sector	Accessories	5	3.2
	Culinary	84	53.2
	Financial services	9	5.7
	Herbs	7	4.4
	Textiles	6	3.8
	Beauty care	9	5.7
	Electronics	8	5.0
	Massage	15	9.5
	Wholesale	8	5.0
	Pet shop	7	4.5

Common Method Variance (CMV)

This study detected CMV, constructed anonymous questionnaires, and randomized the scale item (Podsakoff et al., 2003). Furthermore, for each tested construct, the questionnaires issued to respondents were explained in detail. This study examined Common Latent Factor (CLF) to determine

the presence of CMV using single factor of Harman. The results of Harman's single factor analysis provided a good explanation of the first factor which was smaller than 50.00% (40.84%). The CLF loading factor analysis revealed that the result reached .39, indicating a CMV variance of 1.52%.

Confirmatory Factor Analysis (CFA) Results

This study used the structural equation modeling analysis (SEM) method. SEM analysis is reliable in performing multivariate analysis of complex models (Hair et al., 2019). Anderson and Gerbing (1988) define the matter using two steps: CFA and structural equation modeling in the first and second phases, respectively. CFA is used to identify the framework's measurement model, whereas structural equation modeling supports the offered hypotheses.

The results of confirmatory factor analysis showed good convergent and discriminant validity for all constructs (Hair et al., 2019; Bagozzi & Yi, 1988). While, the data showed normal distribution (Hair et al., 2019). The analysis of CFA results indicated a good model fit. The χ^2 value = 122.430; $\chi^2/(df = 78) = 1.570$, ($p < .001$), good fit index (GFI) = .911; comparative fit index (CFI) = .961, and incremental fit index (IFI) = .962. Other indications such as the Tucker Lewis index (TLI) = .947; normed fit index (NFI) = .901, and the root mean square error of approximately (RMSEA) = .060, also indicate an acceptable model fit. The study's CFA analysis produced a good model fit with CFI, IFI, and TLI values all above .90. Meanwhile, the RMSEA and Standard RMR (SRMR) = .0465, which is above .08, also indicates good model fit.

The subsequent CFA revealed that the model fit was similarly satisfactory. Reliability of item, factor loading of standard, variance of error, construct reliability (CR), and average variance extracted (AVE) fulfilled the suggested standards (Hair et al., 2019). The analysis results demonstrated that the research model was reliable, as evidenced by CR values that exceeded .70, with exact values ranging from .750 to .851. Furthermore, the convergent validity of the study revealed appropriate values of AVE, which ranged between .501 and .657 (>.50). Table 2 shows the specifics of the aforementioned CFAs. The matrix correlation calculations were likewise approved, implying that the AVE square root diagonal computations were greater than the correlations of construct (Fornell & Larcker, 1981). Table 3 shows more information.

Table 2. Results of Confirmatory Factor Analysis Model

Construct	Factor loading	Variance of Error	Composite reliability	Average variance extracted
Transformational leadership				
TL1	.816	.334	.851	.657
TL2	.778	.395		
TL3	.836	.301		

Psychological engagement				
PE1	.703	.506	.771	.530
PE2	.722	.479		
PE3	.757	.427		
Knowledge sharing				
KS1	.774	.401	.837	.632
KS2	.756	.428		
KS3	.851	.276		
Innovative behavior				
IB1	.674	.546	.750	.501
IB2	.771	.406		
IB3	.674	.546		
Job performance				
JP1	.768	.410	.799	.571
JP2	.734	.461		
JP3	.764	.416		

Note: $\chi^2 = 122.430$; $\chi^2/(df = 78) = 1.570$ ($p < .001$); RMSEA = .060; NFI = .901; RFI = .867; IFI = .962; TLI = .947; CFI = .961; RMR = .019; GFI = .911; AGFI = .863; PGFI = .592; SRMR = .0465; and PNFI = .670.

Table 3. Discriminant Validity Correlation Matrix

Construct	TL	PE	KS	IB	JP
TL	.810				
PE	.563	.728			
KS	.201	.504	.795		
IB	.293	.582	.417	.708	
JP	.376	.715	.300	.305	.755

Note: TL, transformational leadership; PE, psychological empowerment; KS, knowledge sharing; IB, innovative behavior; JP, job performance.

Structural Model Analysis and Hypothesis Validation Results

According to Anderson and Gerbing (1988) the second approach is to validate the hypotheses proposed in this model of research. The results of the structural model analysis showed the value of Chi-Square = 133.267, Chi-square/(df = 84) = 1.587, ($p < .001$); RMSEA = .061; GFI = .903; NFI = .893; IFI = .957; TLI = .946; and CFI = .957, which indicated model fit. Furthermore, the IFI, TLI, and CFI values also indicated good model fit with calculations close to 1.00, and above .90. The RMSEA calculation showed a value between .04 and .08, which means model fit. While the standardised RMR (SRMR) = .0523 (less than .08) also shows acceptable model fit (Hu & Bentler, 1999).

Finally, this framework's hypothesis validation demonstrates that all hypotheses are accepted. The study results reveal that TL has a strong influence on PE (H1). Additionally, PE has an effect on KS (H2), JP (H3), and IB (H4). Table 4 shows the outcomes of hypothesis testing.

Table 4. Results of Hypothesis

Hypothesis	Relationship	Estimate	S.E.	C.R.	Conclusion
H1	TL → PE	.597***	.086	6.977	Accepted
H2	PE → KS	.811***	.115	7.030	Accepted
H3	PE → JP	.807***	.107	7.525	Accepted
H4	PE → IB	.761***	.123	6.202	Accepted

Note: *p ≤ .1; **p ≤ .05; and ***p ≤ .001

TL, transformational leadership; PE, psychological empowerment; KS, knowledge sharing; JP, job performance; IB, innovative behavior.

DISCUSSION

Transformational Leadership and Psychological Empowerment

TL has a significant effect on PE. Transformational leaders prioritize their staff. This attention from superiors is a crucial factor in increasing an employee's psychological strength. This type of leader is effective at fostering good communication with subordinates. Open communication will create a pleasant psychological environment for subordinates. This type of leader can also create intrinsic incentive to his or her followers. Intrinsic motivation is motivation that is tied to subordinate psychology rather than financial awards, bonuses, or the like. The intrinsic motivation model might take the shape of praise, gratitude, increased responsibility, trust, and others.

Several studies support the findings of this investigation. According to Avolio et al. (2004), to foster a higher sense of PE, the top management should clearly communicate a vision that encourages people at all levels of the organization to assume greater responsibility for their work. Clarity of purpose and clear definitions of duties, positions, and rewards can contribute to a sense of PE.

Pieterse et al. (2010) suggested that TL aids in enhancing subordinates' innovative behavior. However, organizations should consider the psychological empowerment of subordinates in addition to promoting TL and opposing transactional leadership. Leaders can increase subordinates' psychological empowerment through management development programs. Organizations can manage the use of TL, which is effective in fostering IB, through empowerment programs. Furthermore, studies have shown that TL can be taught, and programs of training have been designed (Pieterse et al., 2010; Barling et al., 1996). Transformational leadership development activities can supplement attempts to improve subordinates' psychological empowerment.

Furthermore, Dvir et al. (2002) discovered that TL had a good effect on subordinates' PE. This study discovered significant favorable relationships between TL and all psychological empowerment scales. This conclusion is consistent with Gumusluolu and Ilsev's (2009) findings. Listening, understanding, supporting, and providing confidence as a leadership style

will boost the sense of psychological empowerment (Gumusluolu & Ilsev, 2009). The works of Stanescu et al. (2020) and Hassan et al. (2021) also demonstrated that TL significantly increased the sense of PE.

Psychological Empowerment and Knowledge Sharing

The finding indicated that PE has a positive effect on KS. It suggests that the greater their subordinates' psychological empowerment, the greater their employees' level of information sharing. Subordinates will feel more at ease if their superiors believe in their capacity to accomplish their duties. This trust is essential for KS. A strong sense of purpose in their job will also motivate subordinates to share expertise freely

Many previous research findings are consistent with the findings of this study. Stanescu et al. (2020) investigated the impact of PE on knowledge management techniques. The findings revealed that PE has a favorable impact on KS. Additionally, Ahmadi et al. (2012) investigated the effect of PE on knowledge-sharing interest. The findings experimentally demonstrate that PE is one of the important elements influencing employees' desire in KS.

Wang et al. (2019) conducted another study. His study focuses on PE and success of project. In his study, KS serves as a moderating variable. The findings indicate that PE and KS have a considerable effect on information sharing and project success, respectively. Andam (2017) investigated the association between PE and KS. The results of a survey of 155 people reveal that two characteristics of PE, self-determination, and impact, have a direct impact on KS. Kang et al. (2017) discovered a substantial positive relationship between PE and two types of KS activities, contribution, and seeking. As a result, PE plays an important part in the knowledge-sharing process.

Andam (2017) empirically confirmed the influence of PE on IB, with KS serving as a moderating component. The study focused on MSMEs in Yogyakarta. The findings indicate that two aspects of PE, meaning, and self-determination, have a favorable effect on KS. Furthermore, Gholipour et al. (2015) found that PE and its aspects were a major predictor of employee knowledge sharing. Khan et al. (2022), Dong et al. (2022) and Khatoon et al. (2022) reached the same conclusion. All of them discovered that PE strongly predicted KS. The previous findings show that under the effect of PE, employees may proactively take on the responsibility of KS.

Psychological Empowerment and Job Performance

PE has a considerable favorable effect on JP. The feeling that subordinates' work is vital to the organization will boost their performance. An optimistic attitude of their abilities to complete their assignment has a beneficial impact on their performance. Similarly, bosses' faith in providing independence in completing their work will increase their work excitement. The performance of subordinates will improve.

Several previous study findings are consistent with the conclusions of this investigation. Helmy et al. (2019) discovered that PE has a moderating effect on individual-level behavioral outcomes like JP. With 357 respondents, Pacheco and Coello-Montecel (2023) discovered that PE improved JP. Rani et al. (2021) discovered that supporting evidence that PE can have a considerable impact on JP.

Different research findings were conducted by Chen et al. (2007) that empirical findings regarding the direct effect of psychological empowerment are varied and even controversial. Seibert et al. (2011) did not find positive relationship between competence, one of the important components of empowerment on performance. While the result of Thomas and Tymon (1994) indicated that competence has a significant effect on performance. These varied findings suggest that the relationship between these two variables could be mediated or moderated by certain variables. This will be an agenda for future research.

Psychological Empowerment and Innovative Behavior

The results demonstrated that PE has a considerable favorable effect on IB. The better subordinates' psychological empowerment, the better their innovative behavior. Superiors' delegated authority over how subordinates execute their work will result in innovative attitudes and behavior. Subordinates are allowed to be innovative in fulfilling their tasks and to generate their own ideas and then implement them in their work.

Several studies have found that PE has a considerable favorable effect. Locke and Shaw (1984) investigated the effect of individual workers' perceptions of autonomy on IB. The result indicated that perceived autonomy had a favorable effect on individual workers' innovative behavior. Helmy et al. (2019) discovered evidence that PE is favorably connected with workplace innovation.

The findings of Javed et al. (2019) revealed a link between PE and IB. It is in line with the study result of de Jong and Kemp (2003) and Singh and Sarkar (2012). Employees who are psychologically empowered will face the challenges of existing job standards and offer unique ideas (Sharifirad, 2013). Traditional work approaches are not compatible with innovative ideas. Employees that are innovative tend to go above and beyond the standard practices. As a result, in the setting of innovation, employees require PE that removes the fear of punishment or dismissal from the workplace (Javed et al., 2019).

The conclusion that PE positively affect on innovative behavior is consistent with Spreitzer's (1995) finding that PE is a predictor of IB. Employees are more likely to originate, promote, and adopt creative ideas when they believe they can affect organizational outcomes.

Furthermore, the findings of Nasir et al. (2018) complement previous findings that PE influences innovative work behavior (Ertürk, 2012). To encourage IB, a leader must distribute responsibility to their staff, convey knowledge widely to employees who need it, and provide their employees

the freedom to complete the allotted job based on their abilities and experience.

According to the findings of Seibert et al. (2011), the three elements of PE, meaningfulness, competence, and self-determination, have a favorable influence on innovative behavior. Javed et al. (2019) discovered evidence that PE is a factor that explains IB in agile teams. Furthermore, the findings of Stanescu et al. (2020); Mustafa et al. (2022); and Rafique et al. (2023) confirmed the finding that PE influenced IB considerably.

CONCLUSIONS

This study was conducted on MSME employees in Semarang, Central Java, Indonesia. There were 158 MSME employees responding. The quota sampling technique was utilized in this investigation. Food and beverage, beauty care, massage services, financial services, wholesale, and others are among the MSME business sectors studied in this study.

The study's finding suggests that TL has a positive impact on PE. Another study found that PE positively affect on KS, JP and IB. In terms of theoretical implications, the findings strengthen the association model between TL, PE, KS, JP, and IB. Practical contributions are also made in this study. The study findings can be used by organizational management to increase KS, JP and IB by enhancing employees' psychological empowerment. Moreover, TL is critical for increasing employees' psychological empowerment.

The study adds to the body of knowledge on the association between TL, PE, KS, JP, and IB. Future studies could broaden the area of independent variables influencing PE. TL serves as an independent variable in this study. As a result, the association model between the variables in this study can provide a more comprehensive picture. Future research can potentially broaden the field of industries studied to broaden generalizability. The study findings also allow future agenda to delve deeper into the effect of PE on JP, which is still highly various. This further research is necessary to take into account specific mediating or moderating variables. As a result, a thorough model of the link between the aforementioned factors will be more clearly depicted.

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